

Presented to:
Missouri Department of
Natural Resources

Use Attainability Analysis

City of Moberly

Tributary to Coon Creek Coon Creek Sweet Springs Creek

July 8, 2005

Submitted by:
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CITY OF MOBERLY
USE ATTAINABILITY ANALYSIS

INTRODUCTION

In September 2000, the U.S. Environmental Protection Agency (EPA) Region VII notified the Missouri Department of Natural Resources (MDNR) that certain elements of the Missouri Water Quality Standards were not consistent with the intent of the Federal Clean Water Act (CWA). One of the elements deemed inconsistent was the limited designation of streams for swimming, or, Whole Body Contact Recreation (WBCR). The CWA establishes as a national goal “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on water”, wherever attainable. These goals presume that all waters should be suitable for fishing and swimming unless attainment of these uses is not feasible per Title 40 Code of Federal Regulations (CFR) Section 131.10.

In response to the EPA concerns, the MDNR is proposing Whole Body Contact Recreation use designation of all classified waters listed in the State regulations or standards. A Use Attainability Analysis, as provided by federal regulations, may be conducted to determine if WBCR use is an appropriate and attainable use for a specific water body or stream segment.

A UAA is an assessment of the factors contributing to the attainment of a use which may include physical, chemical, biological, and economic factors. If a designated use is not an existing use attained on or after November 28, 1975, one of the following attainability factors must justify the removal or downgrading of a designated use:

1. Naturally occurring pollutant concentrations prevent the attainment of the use;
2. Natural, ephemeral, intermittent, or low flow conditions or low water levels prevent the attainment of the use, unless these conditions may be compensated for with sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met;
3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;
4. Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modifications in a way that would result in the attainment of the use;

5. Physical conditions related to the natural features of the water body, such as lack of proper substrate, cover, flow, depth, pools, riffles, and the like unrelated to water quality, preclude the attainment of aquatic life protection uses; or
6. Controls more stringent than those required by Title III Sections 301 and 306 of the CWA would result in substantial and widespread economic and social impact.

MDNR has developed a recreational UAA protocol for Missouri waters which details use attainability elements that may allow removal or downgrading of WBCR uses for specified waters. The UAA protocol for WBCR includes field observations of swimming areas, sampling for pathogenic indicator bacteria, and interviews of nearby landowners to ascertain current and historical recreational use.

The City of Moberly is conducting a UAA to determine whether or not WBCR is an existing or attainable use for the tributary to Coon Creek (that receives the effluent from the City's POTW), Coon Creek, and Sweet Springs Creek. The City is concerned that the potential upgrade that may be required, with nominal beneficial effects, would not be the most responsible use of rate payer fees given the overall system needs, in the pursuit of a WBCR goal if it is not attainable. To address this concern, City staff conducted field observations and interviews on Coon Creek and the tributary, and Sweet Spring Creek during June 2005 to evaluate the segments for existing, potential, and attainable WBCR uses. The assessment and methodology are in accordance with the UAA protocol, and expected to satisfy the requirements of the MDNR.

STUDY AREA

The City of Moberly has three outfalls to the tributary to Coon Creek (WBID#133); the effluent discharge from the POTW and two CSO basins that may discharge during stormwater events. The Tributary to Coon Cr. is one mile in length from its mouth at Coon Creek and is a Class "C" stream. Likewise, Coon Creek (WBID#132) is classified as a Class "C" stream for nine (9.0) miles from the mouth at the Elk Fork of the Salt River. Both drainage courses are in the Basin of the Middle and South Forks of the Salt River 8-digit HUC 07110006.

The City has two CSO wet weather outfalls to Sweet Springs Creek (WBID# 685) that is classified as a Class "C" stream for the entire eleven (11.0) miles to the mouth on the East Fork Chariton River 8-digit HUC 10280203.

METHODOLOGY AND FIELD DATA COLLECTION

The City, with assistance from its consultant Jacobs Civil Inc, identified locations upstream and downstream of the plant discharge where public roads crossed Coon Creek, and a location on private property upstream of the POTW where staff collects water quality samples. These locations were reviewed with Stacia Bax at MDNR and were

agreed as satisfactory for obtaining the protocol data sheet information on the referenced stream segments. There were five sites identified for data collection; two sites above the POTW and three sites below.

Sites were similarly selected on Sweet Springs Creek, with one site above the wet weather outfalls and ten sites below, all at public road crossings.

Geri Blakey, Water Quality Coordinator with the City of Moberly, performed all the field activities and communicated with MDNR staff as to stream designations and identification. Photographs were taken at all locations of upstream and downstream conditions. All observed uses were recorded as listed on the data sheets, as well as, depth measurements and stream characteristics noted.

Interviews were conducted with random property owners along the stream segments. Persons were contacted from the ownership plat maps or referrals from citizens that knew owners along the streams.

OBSERVATIONS, ASSESSMENT, AND CONCLUSIONS

A recreational use is attained and exists when the waterbody is used for a specified recreational activity and the water quality and stream conditions support the specific use.

Coon Creek, the tributary to Coon Creek, and Sweet Springs Creek in the Moberly area **are not** being used for WBCR during base flow conditions based on survey results that documented the following:

- The absence of observed use by City staff conducting the survey
- The absence of personal use by local/adjacent property owners based on interviews
- No observed use by local land owners
- Absence of indicators such as rope swings, paths, diving platforms, or campfires

The shallow depths, generally steep embankments, and the fact that the creeks flow through private property, limit WBCR potential. Swimming and wading should not be considered an existing use on these streams based on the survey results and interviews with property owners.

The information and data collected during this survey indicate that WBCR uses historically do not exist, and do not constitute an existing use that has been attained.

MDNR has determined that natural, ephemeral, intermittent, or low flow conditions prevent WBCR uses (as described in the MDNR UAA protocol) if:

- The average depth of the waterbody is less than 1.64 feet over 50% of all the water surveyed from an observation point; or
- The maximum depth is less than 3.82 feet

WBCR use is considered unattainable due to low flow and shallow conditions that make up the entire length of the streams under consideration. The average measured values for the respective streams are as follows:

STREAM	AVERAGE DEPTH	AVERAGE MAX.
Coon Creek	1.25 feet	1.66 feet
Trib. To Coon Cr	0.20 feet	0.40 feet
Sweet Springs Creek	0.64 feet	1.44 feet

Therefore, the streams Coon Creek, Tributary to Coon Creek, and Sweet Springs Creek do not support attainable WBCR uses due to the absence of observed or historical recreational use and is not an existing use and the low flow shallow conditions prevent WBCR attainability.

The field data sheets, photographs, site location maps, and interviews are included herewith in support of the findings and conclusions.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name: (from USGS 7.5' quad)	tributary to Coon Creek
8-digit HUC:	07110006
Missouri WBID #:	133
County:	Randolph
Upstream Legal Description:	SW1/4, SW1/4, SEC32, T54N, R13W
Downstream Legal Description:	SW1/4, SE1/4, DEC33, T54N, R13W
Upstream Coordinates: (UGS 84, ddd.ddddd)	
Downstream Coordinates: (UGS 84, ddd.ddddd)	
Discharger Facility Name(s):	City of Moberly
Discharger Permit Number(s):	MO-0117960
Number of Sites Evaluated:	2
Name of Surveyor and Telephone Number:	Geri Blakey 660-263-7164
Organization:	City of Moberly
Position:	Water Quality Coordinator

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 133		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat:39.4241 Long:-92.3906			
Date & Time: 5/27/05 14:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: PC		Weather Conditions for Past 7 days: 5/22/05 .52 inch rain (1)	
Photo Ids: Upstream: #20	Downstream: #21	Other: #19 approach to site	

(1) clear to partly cloudy the rest of the week

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

 2 deerstands approximately 60-70 yards apart approximately 30-40 yards from east side of creek bank.
 No foot paths to creek bank.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	<input checked="" type="checkbox"/> RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle

☒ Other: deer stands. ATV tracks lead to deerstands

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

x Riffle	Width (ft): 4	Length (ft): 5	Avg. Depth (ft): 2 in.	Max. Depth (ft): 4 in.
x Run	Width (ft): 4-6	Length (ft): 6	Avg. Depth (ft): 4 in.	Max. Depth (ft): 4 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	<input checked="" type="checkbox"/> Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 3	Length (ft): 3	Avg. Depth (ft):	Max. Depth (ft): 4 in.
Run	Width (ft):	Length (ft):	Avg. Depth (ft): 4 in.	Max. Depth (ft):
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	<input checked="" type="checkbox"/> Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	10	% Gravel	30	% Sand	20	% Silt	40	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	<input checked="" type="checkbox"/> None	Other: (1) clear to partly c
Color:	<input checked="" type="checkbox"/> Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	<input checked="" type="checkbox"/> None	Other:
Surface Deposit:	Oil	Scum	Foam	<input checked="" type="checkbox"/> None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



A – upstream #20



A – downstream #21



A – approach to stream #19

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 133		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4258 Long: -92.3723			
Date & Time: 5/27/05		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear		Weather Conditions for Past 7 days: 5/22/05 .52 inch rain (1)	
Photo Ids: Upstream: #18	Downstream: #16	Other:	

(1) clear to partly cloudy the rest of the week

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 4	Length (ft): 100+	Avg. Depth (ft): 4 in.	Max. Depth (ft): 5 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): slow	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 3	Length (ft): 6-8	Avg. Depth (ft):	Max. Depth (ft): 4 in.
x Run	Width (ft): 5	Length (ft): before/after riffle	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): slow	

Substrate*: (These values should add up to 100%.)

% Cobble	10	% Gravel	30	% Sand	20	% Silt	40	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

some algae

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	None	Other: (1) clear to partly c
Color:	Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	None	Other:
Surface Deposit:	Oil	Scum	Foam	None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



B – upstream #18



B – downstream #16

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name: (from USGS 7.5' quad)	Coon Creek
8-digit HUC:	07110006
Missouri WBID #:	132
County:	Randolph
Upstream Legal Description:	SW1/4, NE1/4, SEC4, T53N, R13W
Downstream Legal Description:	NW1/4, SEC30, T54N, R12W
Upstream Coordinates: (UGS 84, ddd.ddddd)	LAT: 39.4182 LONG: -92.37
Downstream Coordinates: (UGS 84, ddd.ddddd)	LAT: 39.4454 LONG: -92.2994
Discharger Facility Name(s):	City of Moberly
Discharger Permit Number(s):	MO-0117960
Number of Sites Evaluated:	3
Name of Surveyor and Telephone Number:	Geri Blakey 660-263-7164
Organization:	City of Moberly
Position:	Water Quality Coordinator

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 132		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4182 Long: -92.37			
Date & Time: 5/27/05 9:45		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear		Weather Conditions for Past 7 days: 5/22/05 .52 inch rain (1)	
Photo Ids: Upstream: #13	Downstream: #9	Other:	

(1) clear to partly cloudy the rest of the week

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 18-20	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 20 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 3-4	Length (ft): 5-6	Avg. Depth (ft):	Max. Depth (ft): 3 in.
x Run	Width (ft): 20-22	Length (ft): 75-90	Avg. Depth (ft): 4 in.	Max. Depth (ft): 20 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

% Cobble	10 % Gravel	10 % Sand	10 % Silt	70 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other: (1) clear to partly c
Color:	Clear	x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



C – upstream #13



C – downstream #9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 132		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.44 Long: -92.3173			
Date & Time: 5/27/05 8:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear		Weather Conditions for Past 7 days: 5/22/05 .52 inch rain (1)	
Photo Ids: Upstream: #2	Downstream: #4	Other:	

(1) clear to partly cloudy the rest of the week

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	<input checked="" type="checkbox"/> Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

x Riffle	Width (ft): 10-12	Length (ft): 20-25	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
x Run	Width (ft): 18-20	Length (ft):	Avg. Depth (ft): 4 in.	Max. Depth (ft):
x Pool	Width (ft): 18 ft.	Length (ft): 20-30 ft.	Avg. Depth (ft): 20 in.	Max. Depth (ft): 28 in.
x Flow	Present?	Yes No	Estimated (ft ³ /sec): slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 18-20	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 26 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	Yes No	Estimated (ft ³ /sec): slow	

Substrate*: (These values should add up to 100%.)

% Cobble	25 % Gravel	% Sand	% Silt	75 % Mud/Clay	% Bedrock
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ripples

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	^{ripples} x Clear	^{run} x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	^{ripples} x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

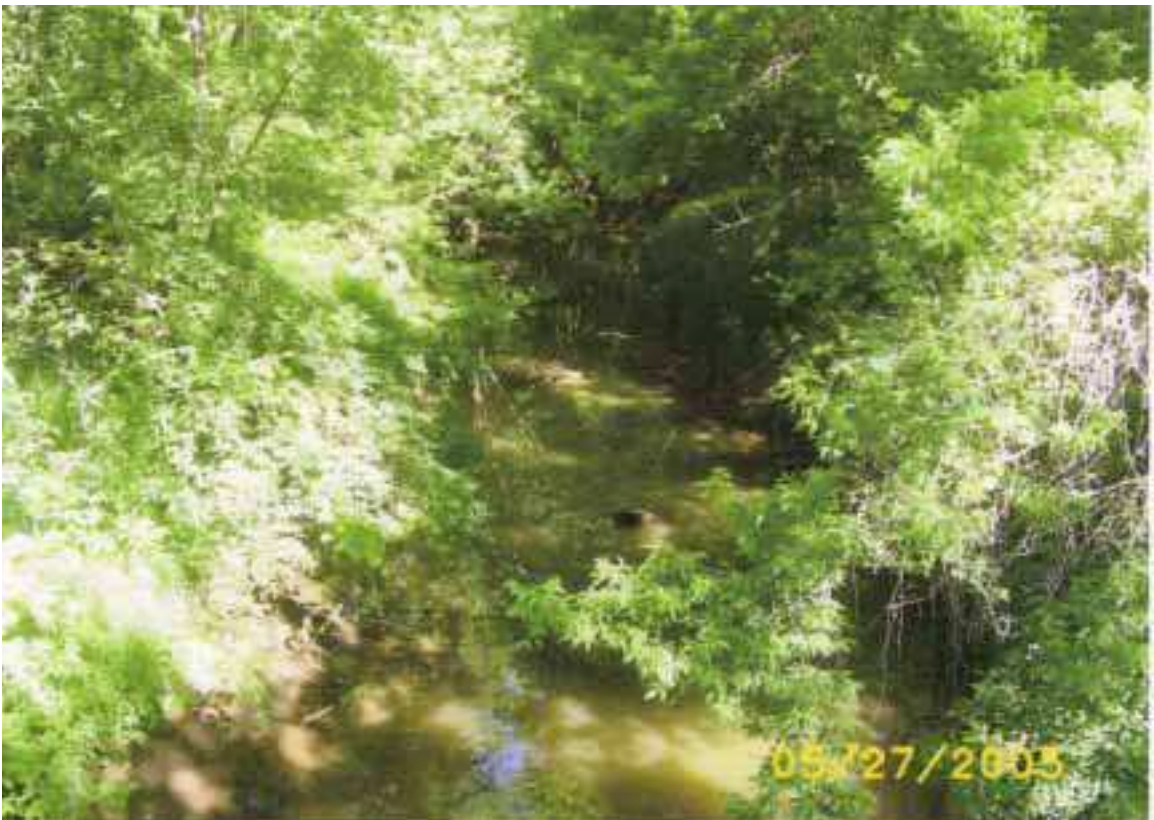
I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



D – upstream #2



D – downstream #4

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 132		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4454 Long: -92.2994			
Date & Time: 6/28/05 8:45		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream:	Downstream:	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				
NOTE: This bridge is currently being replaced.				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 12 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very, very slow	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 3	Length (ft): 3	Avg. Depth (ft):	Max. Depth (ft): 3 inches
x Run	Width (ft): 12 max.	Length (ft): 50	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1.3
x ^{2nd run after riffle}	Width (ft): 10	Length (ft): around bend	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very, very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	30 % Sand	% Silt	70 % Mud/Clay	% Bedrock
----------	----------	-----------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

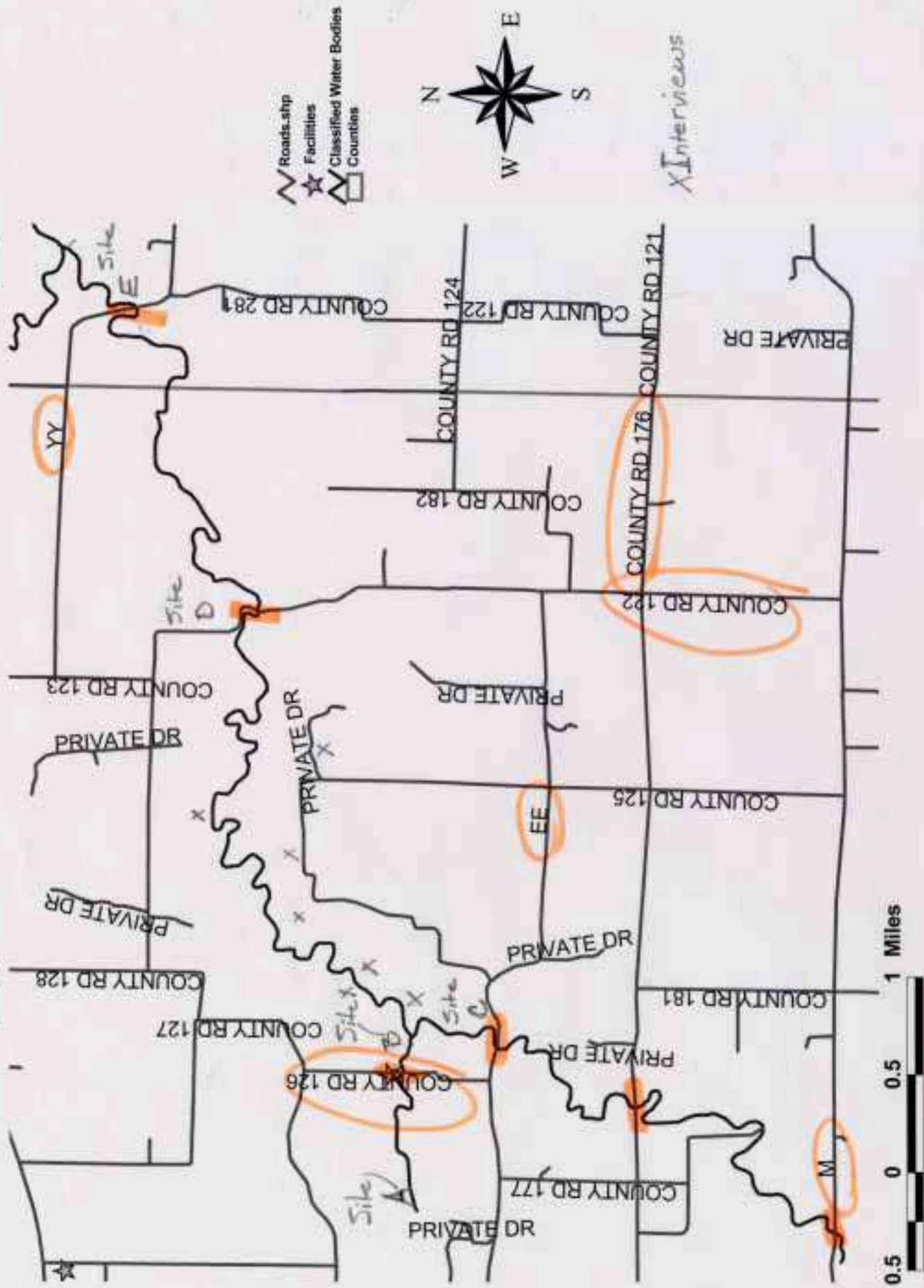
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator

Coon Cr. (C) #0132 & Trib. to Coon Cr (C) #0133



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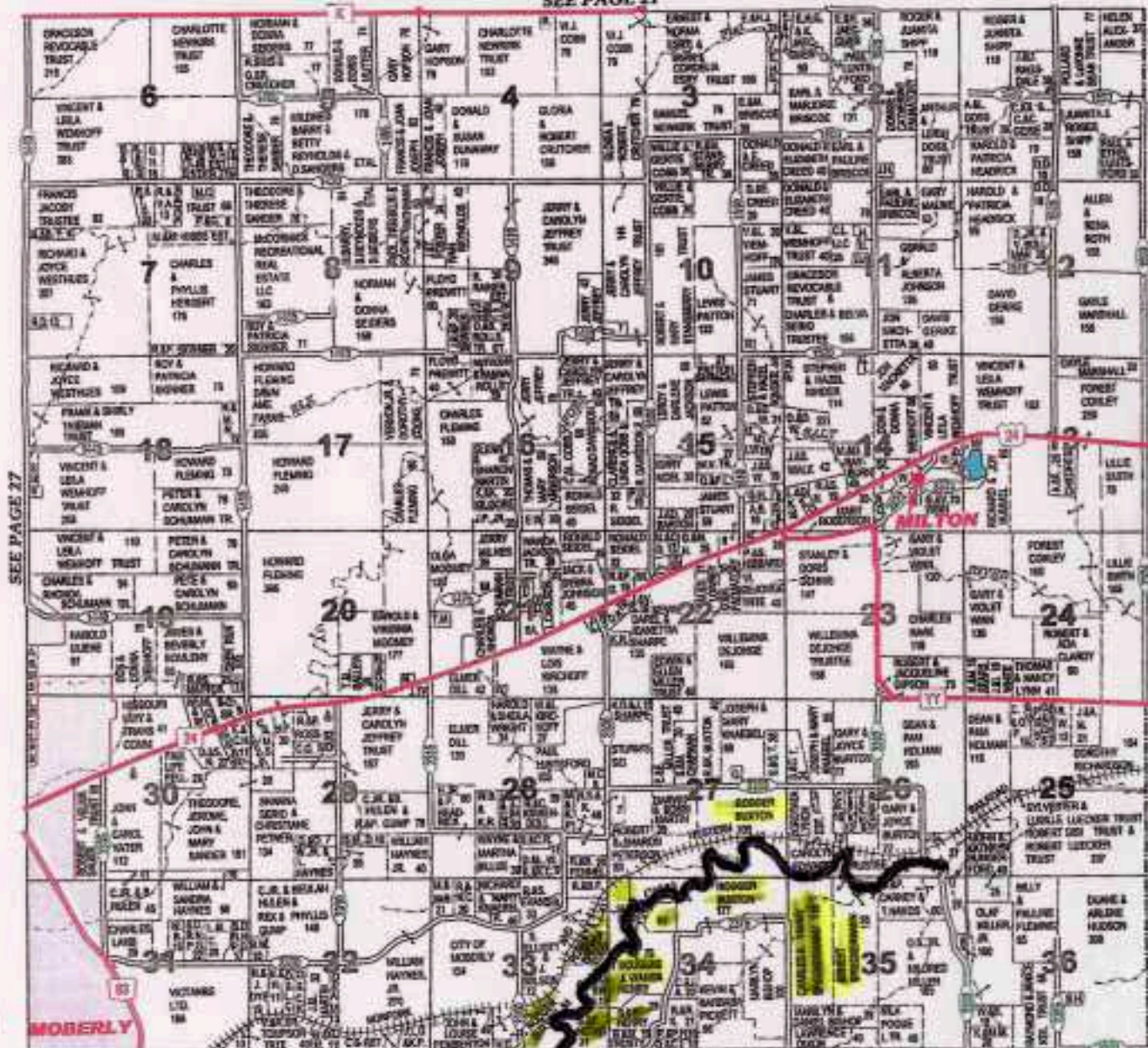


Broker/Owner
Nancy L. Brennan

2819 State Hwy. 114 E. Rd.
Excelsior, MO 65247

TOWNSHIP 54N • RANGE 13W

SEE PAGE 21



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LINTON BORROW

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SEE PAGE 37

Copied from 2003 Randolph County Plat Book

Interviews

The Randolph County Plat book was used to identify the landowners along the surveyed section of Coon Creek. A copy of that particular page is included. The section of creek is marked and the residents available for interviews were highlighted.

The following questions were used for all those interviewed:

1. How long have you lived here?
2. How much creek frontage do you have on your property?
3. What do you use the creek for?
4. Do you have any future plans for using the creek? If yes, what are your plans?
5. What other uses have you seen the creek used for?
6. Do any family members not living with you come here to use the creek? If yes, what do they use it for?
7. Do any friends come here to use the creek? If yes, what do they use it for?
8. Do you know if any of your neighbors use the creek? If yes, who?

Geri Blakey conducted the interviews, either in person or over the phone. The interviews are in narrative form taken from the notes made during the interviews.

Name: Shirley Olney, Land Owner

June 17, 2005

Shirley stated she has lived on the property for 7 years. Coon Creek runs through approximately 15 acres of her land. Her only use for the creek is in crossing it in a 4-wheel drive truck in order to access her land on the other side. Shirley said that during base flow her "crossing" is around 2 inches in depth. When asked if any family or friends use the creek, she answered "only my dog, he swims in it occasionally". Shirley also stated she has no future plans to use the creek and doesn't think any of her neighbors use it either.

Name: Charles and Tammy Spieckermann, Land Owner

June 17, 2005

Tammy stated they sold their property along the creek to Pete and Caroline Schumann approximately 2 years ago.

Name: Pete and Caroline Schumann, Land Owner

June 18, 2005

Caroline related the land along the creek was used as farmland with approximately one mile of creek frontage on the property. Their daughter, Dot Schumann, moved into the farmhouse located on the property about one year ago after the death of her father **Earnest Spieckermann** (former landowner). Caroline stated the creek is not used for swimming or fishing as the base flow depth, on average, is only 6 to 12 inches with a steep bank of 10 or 12 feet. Caroline also said they have no future plans to use the creek nor knows of any neighbors who use the creek for recreational purposes.

Name: Robert Todd, Land Owner

June 20, 2005

Robert said he has lived on the property for over 20 years. He said the creek is way back on the far end of the property with about 100 feet of creek frontage. The creek is not used at this time for anything, but he may use it for crop irrigation at a later date, not sure at this time.

Name: Roger Buxton, Land Owner

June 20, 2005

Roger has lived on the property for 32 years, with almost one mile of creek frontage. He does not use the creek for irrigation or livestock at this time nor does he have any future plans for it. He has fished it from time to time for mudcat, more so "a number of years back". He does not have any family or friends who use the creek and he does not know if any neighbors use it. (Roger owns land on both sides of the State Rd EE bridge.)

Name: Douglas and Wanda Henry, Land Owner

June 20, 2005

Doug and his wife have lived on the property for about 10 years. He has about 2/3 mile of creek frontage with a maximum depth of 3 feet during

base flow. He does not use the creek for anything at this time nor do any family or friends, but he has hunted the area around the creek. (Deer and various other wildlife use it as a watering hole.) He mentioned the possibility of using the creek for crop irrigation at a later date, not sure yet.

Name: Scott Henry, Land Owner

June 20, 2005

Scott has lived on the property for "6 or 7 years". Scott stated he has approximately a quarter mile of creek frontage on his property with a maximum depth of 3 feet during base flow. When asked if he used the creek for anything, he answered, "No". He also replied he has no future plans for the creek and has not seen nor heard of anyone else using it for swimming, boating or fishing. Scott said the water quality in his area of Coon Creek greatly improved after the City of Moberly Wastewater Treatment Facility began discharging into it.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name: (from USGS 7.5' quad)	Sweet Springs Creek
8-digit HUC:	East Fork Chariton River 10280203
Missouri WBID #:	685
County:	Randolph
Upstream Legal Description:	NW1/4, SEC 11, T53N, R14W
Downstream Legal Description:	NE1/4, SEC 12, T53N, R16W
Upstream Coordinates: (UGS 84, ddd.dddd)	LAT: 39.4056 LONG: -92.4592
Downstream Coordinates: (UGS 84, ddd.dddd)	LAT: 39.4139 LONG: -92.6564
Discharger Facility Name(s):	City of Moberly Wastewater Treatment Facility
Discharger Permit Number(s):	MO-0117960
Number of Sites Evaluated:	11 (A-K)
Name of Surveyor and Telephone Number:	Geri Blakey 660-263-7164
Organization:	City of Moberly
Position:	Water Quality Coordinator

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4056 Long: -92.4592			
Date & Time: 6/28/05 6:31		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #1	Downstream: #3	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 5	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 5 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 7 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	% Sand	% Silt	100 % Mud/Clay	% Bedrock
----------	----------	--------	--------	----------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

--

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



A – upstream #1



A – downstream #3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4012 Long: -92.4645			
Date & Time: 6/28/05 6:50		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #6, #7	Downstream: #8, #9	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 6 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 4 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 2	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
x Pool	Width (ft): 15	Length (ft): 30	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	10 % Gravel	% Sand	% Silt	90 % Mud/Clay	% Bedrock
----------	-------------	--------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



B – upstream #6



B – upstream #7



B – downstream #8



B – downstream #9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3975 Long: -92.4672			
Date & Time: 6/28/05 7:05		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #10, #11	Downstream: #12, #13	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft):	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 1.5	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 5 in.
x Pool	Width (ft): 20	Length (ft): 18	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	20 % Gravel	% Sand	% Silt	80 % Mud/Clay	% Bedrock
----------	-------------	--------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



C – upstream #10



C – upstream #11



C – downstream #12



C – downstream #13

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3978 Long: -92.4687			
Date & Time: 6/28/05 7:20		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #17	Downstream: #16	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 1.5	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 4 in.
x Pool	Width (ft): 6	Length (ft): 11	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
x Flow	Present? Yes x No	Estimated (ft ³ /sec):		

concrete used as riprap old plastic pool and bike frame dumped

Downstream View Physical Dimensions:

x Pool	Width (ft): 1.5	Length (ft): 6	Avg. Depth (ft):	Max. Depth (ft): 3 in.
Run	Width (ft):	Length (ft):	Avg. Depth (ft): 4 in.	Max. Depth (ft):
x Pool	Width (ft): 5 max.	Length (ft): 25	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present? Yes x No	Estimated (ft ³ /sec): very slow		

dry area between pools, then dry again

Substrate*: (These values should add up to 100%.)

% Cobble	5	% Gravel	% Sand	% Silt	95	% Mud/Clay	% Bedrock
----------	---	----------	--------	--------	----	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



D – downstream #16



D – upstream #17

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3961 Long: -92.4916			
Date & Time: 6/28/05 7:28		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #19	Downstream: #20, #21	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
<input checked="" type="checkbox"/> Other: trash dumped				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 5	Length (ft): 3	Avg. Depth (ft):	Max. Depth (ft): 3 in.
x Run	Width (ft): 5	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

% Cobble	20 % Gravel	% Sand	% Silt	80 % Mud/Clay	% Bedrock
----------	-------------	--------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



E – upstream #19



E – downstream #20



E – downstream #21

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4009 Long: -92.5076			
Date & Time: 6/28/05 6:55		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #22, #23	Downstream: #24	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
<input checked="" type="checkbox"/> Other: considerable amount of trash dumped on the downstream side of the bridge				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

x Riffle	Width (ft): 1	Length (ft): 6 in.	Avg. Depth (ft):	Max. Depth (ft): 2 in.
x Run	Width (ft): 4	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
x Pool	Width (ft): 6	Length (ft): 6	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Run #2 3 6 3 in. 5 in.

Substrate*: (These values should add up to 100%.)

% Cobble	25	% Gravel	% Sand	% Silt	75	% Mud/Clay	% Bedrock
----------	----	----------	--------	--------	----	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

--

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



F – upstream #22



F – upstream #23



F – downstream #24

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3945 Long: -92.5368			
Date & Time: 6/26/05 6:36		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #24	Downstream: #25, #26	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
<input checked="" type="checkbox"/> Other: a/c unit dumped on downstream side of bridge; hunk of concrete; other debris				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

x Riffle	Width (ft): 3	Length (ft): 4	Avg. Depth (ft): 1 in.	Max. Depth (ft): 2 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	25	% Gravel	% Sand	% Silt	75	% Mud/Clay	% Bedrock
----------	----	----------	--------	--------	----	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



G – upstream #24



G – downstream #25



G – downstream #26

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3945 Long: -92.5368			
Date & Time: 6/25/05 9:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot, humid		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #20	Downstream: #18	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.) farm crops on north side of creek, both upstream and downstream				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Small area of riprap on north side of downstream

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	30	% Gravel	% Sand	% Silt	70	% Mud/Clay	% Bedrock
----------	----	----------	--------	--------	----	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	Clear	x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



H – downstream #18



H – upstream #20

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4105 Long: -92.577			
Date & Time: 6/25/05 9:00		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot, humid		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #12	Downstream: #14	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	<input checked="" type="checkbox"/> Fence	Steep slopes	Other:	

riprap on bank; (fence is on northwest side)

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 15 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1.3
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

x Riffle	Width (ft): 4	Length (ft): 30	Avg. Depth (ft):	Max. Depth (ft): 4 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1
x Pool	Width (ft): 25	Length (ft): 35	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	25	% Gravel	% Sand	% Silt	75	% Mud/Clay	% Bedrock
----------	----	----------	--------	--------	----	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae on rocks under bridge (riffle)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	Clear	x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



I upstream #12



I – downstream #14

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.4017 Long: -92.5963			
Date & Time: 6/25/05 8:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #7, #8	Downstream: #9	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
<input checked="" type="checkbox"/> No trespass sign	Fence	Steep slopes	Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: road used to access field along side of creek (see photo #1)				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

2 Riffle	Width (ft): 4/3	Length (ft): 1.5/2	Avg. Depth (ft): 1 in./1 in.	Max. Depth (ft): 2 in./2 in.
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1
x Pool	Width (ft): 6	Length (ft): 12	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 25 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	15 % Gravel	15 % Sand	% Silt	70 % Mud/Clay	% Bedrock
----------	-------------	-----------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae on rocks under bridge (riffle)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: murky
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly **Position:** Water Quality Coordinator



J – upstream #7



J – upstream #8



J – downstream #9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: State Hwy 3 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3923 Long: -92.6139			
Date & Time: 6/25/05 6:55		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #2, #3	Downstream: #4, #5	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
<input checked="" type="checkbox"/> Other: old tire dumped				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

2 Riffle	Width (ft): 3/3	Length (ft): 6/20	Avg. Depth (ft): 2 in./3 in.	Max. Depth (ft): 3 in./5 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
x Pool	Width (ft): 25	Length (ft): 20	Avg. Depth (ft): 1	Max. Depth (ft): 1.3
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 12 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

25 % Cobble	30 % Gravel	25 % Sand	% Silt	20 % Mud/Clay	% Bedrock
-------------	-------------	-----------	--------	---------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** _____

Organization: City of Moberly Position: Water Quality Coordinator



K - upstream #2



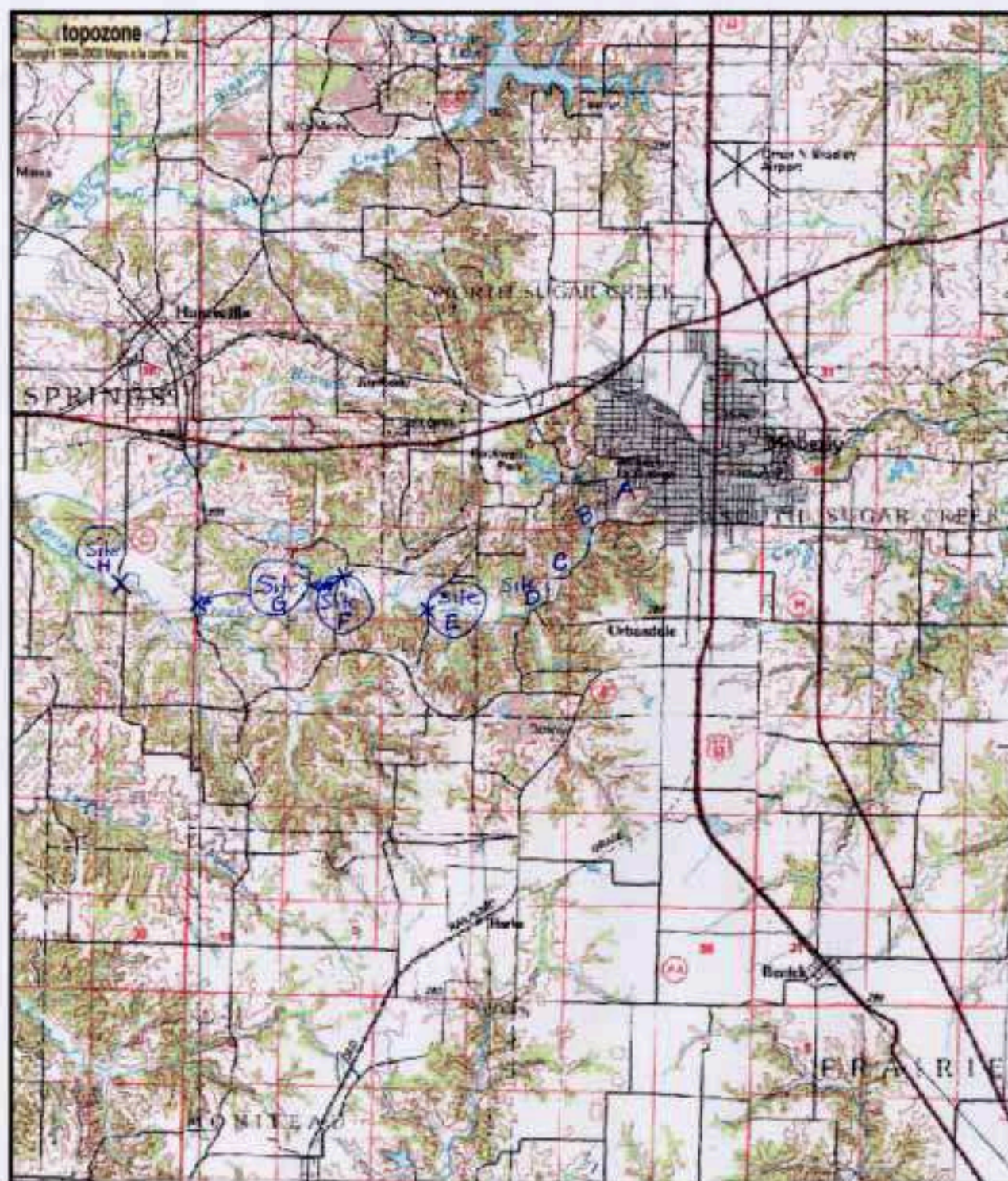
K - upstream #3



K – downstream #4



K – downstream #5



0 1 2 3 4 5 km
0 1 2 3 4 5 mi
Map center is UTM 15 545317E 4361066N (WGS84/NAD83)
Moberly quadrangle
Projection is UTM Zone 15 NAD83 Datum

M=1.43
G=0.334



0 1 2 3 4 5 km
0 1 2 3 4 5 MI
Map center is UTM 15 530076E 4361069N (WGS84/NAD83)
Clifton Hill quadrangle
Projection is UTM Zone 15 NAD83 Datum

M=1.572
G=0.222

TOWNSHIP 53N • RANGE 15W

SEE PAGE 25

TOWNSHIP 53N • RANGE 14W

SEE PAGE 27

HUNTSVILLE

MOORE

SEE PAGE 42

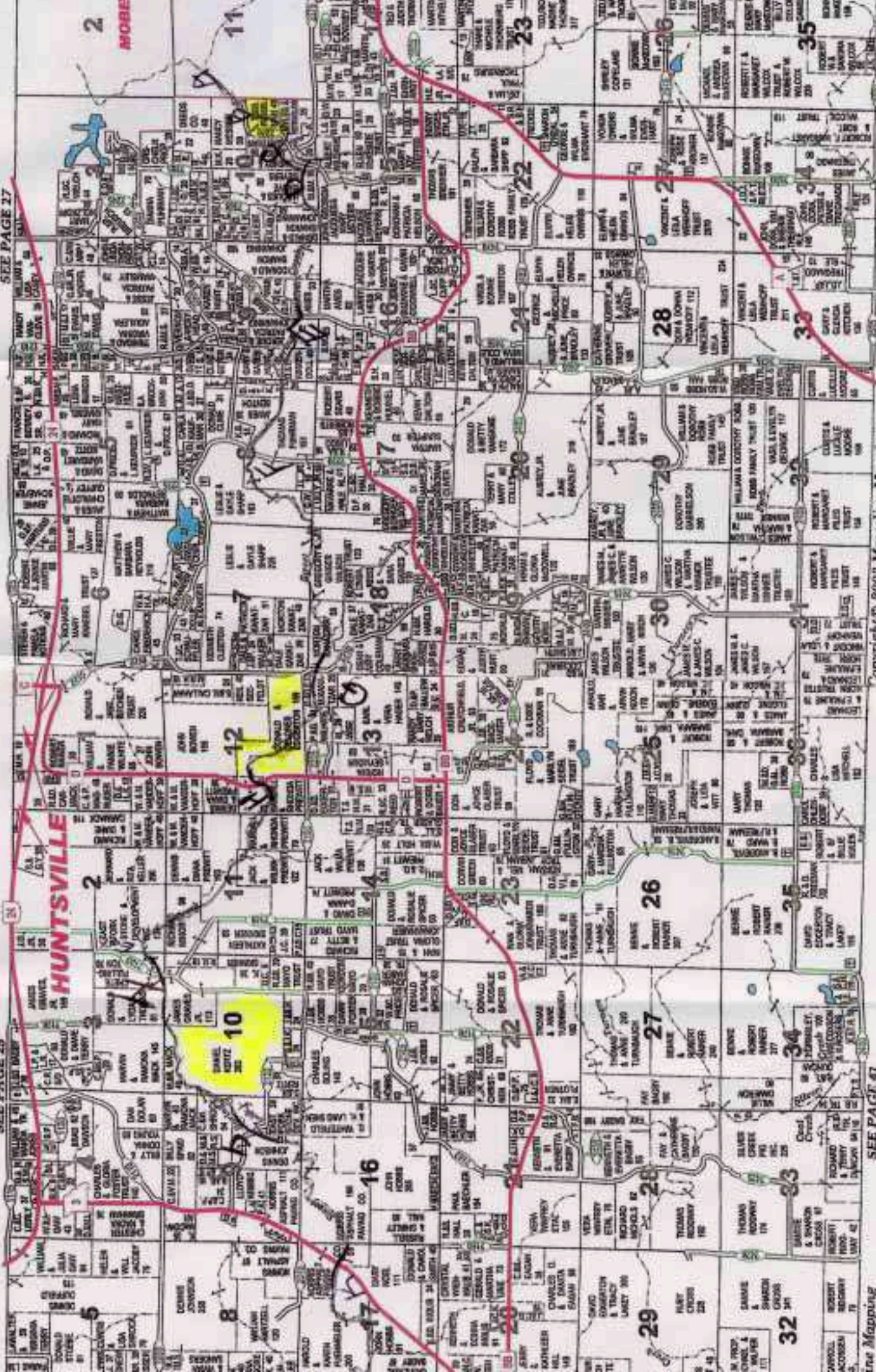
See Mapping

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SEE PAGE 43

INTERVIEW SITES

SITES IN YELLOW



Interviews

The Randolph County Plat book was used to identify the landowners along the surveyed section of Sweet Springs Creek. Copies of the particular pages were assembled into a map and included. The section of creek is marked and the residents available for interviews were highlighted.

The following questions were used for all those interviewed:

1. How long have you lived here?
2. How much creek frontage do you have on your property?
3. What do you use the creek for?
4. Do you have any future plans for using the creek? If yes, what are your plans?
5. What other uses have you seen the creek used for?
6. Do any family members not living with you come here to use the creek? If yes, what do they use it for?
7. Do any friends come here to use the creek? If yes, what do they use it for?
8. Do you know if any of your neighbors use the creek? If yes, who?

Geri Blakey conducted the interviews, either in person or over the phone. The interviews are in narrative form taken from the notes made during the interviews.

Terrence Fusselman, Landowner

June 29, 2005

Mr. Fusselman stated he and his wife have lived on the property since 1969. He said Sweet Springs Creek runs the through entire length of his 40 acres and another 20 acres or so along the edge of his property. He does not use the creek for anything now, and when asked does he have any future plans for the creek, he said, "not at my age I don't". Mr. Fusselman reported that none of his family or friends use the creek nor knows of any neighbors that use it. Mr Fusselman did comment that the creek is unreliable for crop irrigation or livestock watering as it "dried completely up two or three years ago".

Daniel Kurtz, Landowner

June 29, 2005

Mr. Kurtz has lived on this land for 12 years. Mr. Kurtz stated that Sweet Springs Creek is on the north end of his farm with around two-thirds to three-quarters mile of creek frontage. He reported his only use for the creek at this time is hunting in the area of the creek and has no future plans for the creek. He also stated he doesn't know of any neighbors who use it.

Donald and Deloris Edgerton, Landowners

June 29, 2005

Mr. Edgerton stated he has lived on his land since 1972. Sweet Springs Creek runs through the entire length of his property with approximately "a mile or so" of creek frontage. He does not use the creek for anything at present and does not have any future plans for the creek. Mr. Edgerton said that during dry weather " I can walk across the creek and not get my feet wet". He also stated that he does not allow anyone to hunt on his property.

Public Comments Received on Coon Creek #0132 in Randolph and Monroe Counties

First Name	Last Name	WB Name	WBID #	Summary of Comments	Date Rec'd	Date Postmarked
Robert	Brundage	Coon Creek	0132	The City of Moberly submitted an original UAA with site visits and interviews along with supplemental information of additional sites visits and interviews after the staff recommendation. Although pools at these sites may occasionally meet the Department's depth guidelines for WBCR, these portions of the stream are inaccessible from land because of heavy brush and high, steep banks, and they are inaccessible from within the stream itself because of numerous obstacles, such as beaver dams and fallen trees, encountered along the entire length of the creek.	28-Nov-05	FAX
Cindy	DiStefano	Coon Creek	0132	Department staff visited with landowners along Coon Creek to inquire about use of the creek that crossed their property. Mr. Todd stated that he takes his grandchildren to the creek to play on a small sandbar. Dr. Afrassiab stated that her children wade in the creek waist deep looking for crayfish. She also stated that there are holes deep enough to swim on their property. Several landowners stated that they previously swam and fished in the creek, but no longer participate in those activities due to pollution from the prison facility.	28-Nov-05	e-mail
Dean	Holman	Coon Creek	0132	My sons and I hunt and hike along the creek, as do several of my friends and neighbors. Some of my neighbors have also asked my permission to trap along the creek. Hunting and trapping occurs during April-May and October-February. I have fished in Coon Creek any time during the year. On several occasions I have seen people fishing from the bridge adjoining my property (Randolph County Road 2380 and east along the creek for ~0.5 miles). Coon Creek has several pools that contain water throughout the year and attracts wildlife.	27-Oct-05	e-mail
Larry	Johnson	Coon Creek	0132	Comments about the creek should include Elk Fork all the way to Mark Twain Lake because water discharged by the Moberly filter plant is usually the only flow all the way to the lake. The public could wade where water flows over the low water crossing at the Union Covered Bridge. Downstream from the Bee Creek intersection is a fishing area open to the public and there could be wading and fishing there. Coon Creek is deep enough to paddle around in for a beginning swimmer.	14-Nov-05	10-Nov-05

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Thomas	Jones	Coon Creek	0132	Jacobs Civil, Inc, in cooperation with the City of Moberly, concluded that Coon Creek does not support an attainable WBC recreation use based on the depth criteria. Only one actual measurement barely met the average criterion and one measurement noted in an interview almost met the max. criterion. Summer vegetation of thick brush and briars and the high steep slopes made access extremely difficult. No WBC was observed during the survey. No interviews noted use of the creek for WBC activities.	01-Sep-05	29-Aug-05
Julie	Marino	Coon Creek	0132	We are Citizens Against River Exemption (CARE), a group of Missourians that fights for the sanitation of our rivers. We are troubled by the decision of the Clean Water Commission to exempt one hundred forty-two rivers from the new water quality rules. Incorporating all rivers under the Clean Water Act's updated water quality rules will prevent civilians from experiencing preventable illnesses.	21-Nov-05	19-Nov-05
John	Meyer, M.D.	Coon Creek	0132	Favors maintaining the highest water standards for all our rivers, creeks, and watersheds. The Mississippi River, River des Peres, Maline Creek and Coon Creek are most important to maintain for recreation because they are close to major population centers.	27-Nov-05	e-mail
William	Reeves, Ph.D.	Coon Creek	0132	The creek met the average depth requirement at one site and an interview provided evidence that the creek contains at least one pool that is three feet deep during base flow conditions. Nowhere in EPA's WQS regulations is there a mention of inaccessibility as a factor to consider when assessing attainability.	14-Nov-05	e-mail